

IN THE CLAIMS:

Please amend the claims as indicated. A complete set of the claims is included below, reflecting added subject matter (*underlining*) and deleted subject matter (*strikethrough*), as well as the current status of each claim. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of storing information related to a file without unnecessary duplication, comprising the steps of:
 - obtaining content and metadata of the file, wherein the file was stored in a first environment;
 - in a second environment, storing the content and the metadata of the file, wherein the content is associated with the metadata, and wherein the second environment is different from the first environment;
 - obtaining a location where the file was stored in the first environment;
 - in the second environment, storing the location in a location table, wherein the location table includes at least one of the following:
 - a link to the content, indexed in response to the location in the first environment;
 - and a link to the metadata, indexed in response to the location in the first environment;
 - and
 - reconstituting. at least a piece of the file by accessing. at least one of the following in the location table: the link to the content. in response to the location: and the link to the metadata. in response to the location; and
 - storing the content in a content hash table and the metadata in a metadata hash table.
2. (Currently Amended) The method of claim 1, wherein the content is stored in a an entry of the content hash table, and wherein the metadata is stored in a an entry of the metadata hash table.

3. (Currently Amended) The method of claim 2, wherein the step of storing the content and metadata further comprises the steps of:

- generating a digital signature from the content;
- generating a digital signature from the metadata;
- storing the content in an entry in the content hash table, wherein the content's digital signature is an index into the content hash table, so that the content's digital signature is the link to the content; and
- storing the metadata in an entry in the metadata hash table, wherein the metadata's digital signature is an index into the metadata hash table, so that the metadata's digital signature is the link to the metadata.

4. (Previously presented) The method of claim 3, wherein at least one of the digital signatures is generated using a hashing algorithm.

5. (Previously presented) The method of claim 4, wherein the hashing algorithm is the SHA1 secure hashing algorithm.

6. (Previously presented) The method of claim 3, wherein the entry in the content hash table comprises the content and the link to the metadata.

7. (Previously presented) The method of claim 6, wherein the entry in the metadata hash table comprises the metadata and the link to the content.

8. (Canceled).

9. (Previously presented) The method of claim 3, wherein the location table is a location hash table, and wherein storing the location comprises:
generating a digital signature from the location; and

storing the location in an entry in the location hash table, wherein the location's digital signature is an index into the location hash table, so that the location hash table is indexed in response to the location by indexing with the location's digital signature.

10. (Currently amended) A database for storing components of a file that was stored in a first environment, the database comprising a data processing system readable medium having code embodied within the data processing system readable medium, the code comprising instructions for:

a content hash table in a second environment, wherein an entry in the content hash table includes: content of the file; and at least one link to metadata associated with the content, wherein a digital signature of the content is an index into the content hash table, and wherein the second environment is different from the first environment;

a metadata hash table in the second environment, wherein an entry in the metadata hash table includes: metadata of the file; and at least one link to content associated with the metadata, wherein a digital signature of the metadata is an index into the metadata hash table;

a location hash table in the second environment, wherein an entry in the location hash table includes: a location where the file was stored in the first environment; and at least one of the following: a link to content associated with the location in the first environment; and a link to metadata associated with the location in the first environment; wherein a digital signature of the location is an index into the location hash table, wherein the content's digital signature is the link to the content, and wherein the metadata's digital signature is the link to the metadata; and

reconstituting at least a piece of the file by accessing at least one of the following in the location hash table: the link to content associated with the location; and the link to metadata associated with the location.

11. (Canceled).

12. (Previously presented) The database of claim 10, wherein an entry in the content hash table further includes at least one link to the location associated with the content, wherein the location's digital signature is the link to the location.

13. (Previously presented) The database of claim 12, wherein an entry in the metadata hash table further includes at least one link to the location associated with the metadata, wherein the location's digital signature is the link to the location.

14. (Currently Amended) A data processing system readable medium having code for storing information related to a file, wherein the code is embodied within the data processing system readable medium, the code comprising instructions for:

obtaining content and metadata of the file, wherein the file was stored in a first environment;

in a second environment, storing the content and the metadata, wherein the content is associated with the metadata, and wherein the second environment is different from the first environment;

obtaining a location where the file was stored in the first environment;

in the second environment, storing the location in a location table, wherein the location table includes at least one of the following:

a link to the content, indexed in response to the location in the first environment;
and a link to the metadata, indexed in response to the location in the first environment;
and

reconstituting at least a piece of the file by accessing at least one of the following in the location table: the link to the content, in response to the location: and the link to the metadata, in response to the location.

15. (Previously presented) The data processing system medium of claim 14, wherein the content is stored in a content hash table, and wherein the metadata is stored in a metadata hash table.

16. (Previously presented) The data processing system medium of claim 15, wherein storing the content and metadata comprises:

- generating a digital signature from the content;
- generating a digital signature from the metadata;
- storing the content in an entry in the content hash table, wherein the content's digital signature is an index into the content hash table, so that the content's digital signature is the link to the content; and
- storing the metadata in an entry in the metadata hash table, wherein the metadata's digital signature is an index into the metadata hash table, so that the metadata's digital signature is the link to the metadata.

17. (Previously presented) The data processing system medium of claim 16, wherein at least one of the digital signatures is generated using a hashing algorithm.

18. (Previously presented) The data processing system medium of claim 17, wherein the hashing algorithm is the SHA1 secure hashing algorithm.

19. (Previously presented) The data processing system medium of claim 16, wherein the entry in the content hash table comprises the content and the link to the metadata.

20. (Previously presented) The data processing system medium of claim 19, wherein the entry in the metadata hash table comprises the metadata and the link to the content.

21. (Canceled).